Joint Fire Science Program Final Reporting Requirements for Funded Projects April 2017

The following guidance is meant to assist Principal Investigators in understanding and meeting the requirements of their Joint Fire Science Program (JFSP)-funded project. The first section—Project Status—outlines the criteria that the Program Office uses to determine when a project can be considered complete. The next two sections—Final Deliverables and Other Products—distinguish required project deliverables from other products a project may produce but that are not used as a basis to determine project completeness. The final section—Final Report Guidance—provides additional details regarding the format and content of a JFSP final report.

Project Status

The Program Office uses the following criteria to determine if a project is complete, relative to deliverable status:

- Final report:
 - Data collection must be complete
 - Data analysis must be complete
 - o Results, conclusions, and implications for management implementation and future research must be complete
 - Metadata must be complete (if applicable)
- Task statement specific deliverables: If user-oriented products (e.g., user guides, fact sheets, videos) were explicitly identified in the task statement as required deliverables, they must be complete and available for upload to the JFSP website
- Software: If software was identified as a deliverable in the task statement, a working version of the software and a complete version of system documentation should be complete and available for upload to the JFSP website or preferably a hotlink provided to where the software will be hosted. Documentation should describe as appropriate any debugging procedures used to verify software performance, guidance to end-users as to application of the software, and business plans for ongoing maintenance of the software and its continued public access.

Final Deliverables

Final report

Final reports will be reviewed by the Program Office to ensure the adequacy of reports and to help identify particularly relevant or useful results. Each JFSP-funded Principal Investigator (PI) is responsible for submitting final report documentation, including metadata as applicable, by the project termination date to the JFSP database through the JFSP website via the **Final Report tab**. More detailed final report content guidance is provided below. All projects' metadata ultimately are archived with the Forest Service Research and Development Data Archive; however, associated data sets can be archived with the Forest Service or other appropriate repository as identified in the project proposal's Data Management Plan. Although the Program Office's review is to ensure that metadata, when required, are submitted as part of the project's

deliverables, the PI ultimately is responsible for ensuring acceptable metadata are submitted to the Forest Service Research and Development Data Archive.

Task statement-specific deliverables

Based on the objectives of specific task statements, additional deliverables beyond a final report may be required. Such deliverables and their type will be identified explicitly in the text of the task statement. Examples are user guides, models, or decision support tools. The PI submits the preceding to the JFSP database through the JFSP website via the **Deliverables tab**.

Other Products

In addition to a project's required deliverables (discussed above), some projects may want to provide additional products that document the accomplishments of that project. Such products may add value to a project but are not reviewed by the Program Office to determine a project's completeness. All final narrative products should include an electronic version suitable for distribution, posting, etc. Copies of all narrative deliverables should be uploaded directly to the JFSP database through the JFSP website via the **Other Products tab**. For materials that are not publicly releasable via a public website due to copyright issues, they should be submitted as **Draft** (under the **Product Status field**). Models or decision support tools, if not provided directly to JFSP, may be provided via links to the web site of the institution at which they are hosted. For software the Program Office preference is posting on a non-JFSP host web site. Three specific additional products are described below.

Key Findings

Investigators are asked to enter and attribute the key findings from their work directly into the JFSP database through the JFSP website and via the **Findings tab**. The findings data dictionary describes the attributes and is available from the JFSP website.

Photographs

Investigators are asked to upload three to five photographs that do not have any copyright restrictions from their project directly to the JFSP database through the JFSP website via the **Other Products tab** under the **Photograph category**. Photographs may be used in Fire Science Digests and other products.

Project Overview

To more easily communicate the outcomes of completed JFSP-funded projects, projects are requested to submit a modified version of their final report abstract within a one- to two-page format (template posted on the **Add Project Overview page** on the **Other Products tab**). This Project Overview should incorporate the contents of the abstract in an abbreviated, concise form but also include appropriate graphics and pictures that can assist in communicating the key outcomes and implications for management of the project.

Final Report Guidance

All JFSP-funded projects responding to task statements under a Funding Opportunity Notice are required to prepare and submit a final report following this guidance. Agencies that have internal policies regarding report formats can follow those as applicable; however, reports must still include the content elements below. Internal agency review policies should ensure the timely delivery of a project's final report in accordance with the agreed upon project timeline.

The final report is meant to be a compilation and synthesis of the objectives, methods, results, and conclusions of the project as a whole. It should constitute a stand-alone scientifically defensible technical document that can be referenced. Its length is determined by what is necessary to provide a complete accounting of research accomplished under the project; however, length should not exceed more than 30 pages (excluding cover page, front matter, and appendices). Final report authors should not assume that the reader has access to the original proposal nor to any progress reports that have not been published.

Format and contents of the report

Cover page: Use the JFSP template for the cover page (posted on the **Final Report tab**) and include the project title, JFSP project number, anticipated publication date (month and year), and PI and co-PI's names and affiliations. For agency-generated reports meant to represent the final report, appropriate reference to JFSP funding and use of its logo are requested.

Front Matter: Provide a Table of Contents, List of Tables, List of Figures, List of Abbreviations/Acronyms, Keywords, and Acknowledgements. Table and figure titles in these lists should be a single descriptive sentence that clearly identifies the table/figure and should not include the additional information that may be included in the caption used to describe the table/figure in the main body of the report.

Abstract: Provide an abstract not exceeding one page in length that contains in a concise but clear manner the principal motivation of the study (i.e., the fire-related problem(s) or scientific question(s) explored), study objectives (and whether they were met), methodology synopsis (especially if somewhat novel), key results/findings, and important conclusions relative to the present and potential future applications of the research to management or policy. The abstract should contain enough basic information so that the contents and scope of the report will be evident to those who do not have access to the full text of the report. Footnotes, citations, and abbreviations should be avoided in the abstract.

Objectives: State the original study objectives and indicate how they relate to the applicable task statement under which the proposal was submitted. In addition, indicate which objectives were met and which were not, and if not why not. If the JFSP approved changes to the original study objectives indicate what those changes were and why they were needed. Any working hypotheses that formed the basis of the research approach also should be clearly stated.

Background: Briefly provide any relevant context about the problem(s) or question(s) being addressed, including the state of the science surrounding it, whether it involves any regulatory or

policy issue, and its implications for managers, as applicable. Use this section to introduce in a general way, why the study and its technical approach were designed the way they were.

Materials and Methods: This section can be brief, but should contain enough detail on the experimental design, methods, and analyses used so a reader can follow what was done and why. Only truly new methods should be described in detail; otherwise, cite previously published methods as needed. Study area or study system descriptions should be added here at the detail necessary to place results and conclusions into the appropriate context.

Results and Discussion: Discuss specific experiments/assessments that were performed and provide figures and tables that highlight the data obtained during the project. Study results should be presented succinctly but with sufficient detail to capture all scientific and technical work accomplished under JFSP funding without repeating verbatim information that already has been published in the primary literature. Discuss the implications and relevance of the overall results or products in addressing the project's objectives. Significant results should be placed into context of the extant literature: are the results contradictory to, supportive of, or supplemental to what we knew before the study? Finally, include a sub-section that describes science delivery activities, including interactions with the JFSP Fire Science Exchange Network, and products that the project accomplished and any future planned actions.

Conclusions (Key Findings) and Implications for Management/Policy and Future Research: Avoid simply rehashing results or providing a non-cohesive list of bulleted findings. This section should be an overall, well thought-out synthesis of the primary results and conclusions derived from the project's results, especially as they relate to whether the original study objectives were met. Specific sub-sections, as applicable, should be included on the implications of the results to management/policy, including the opportunities for direct implementation by end users, as well as the implications for future research. In the latter context, describe how the research resolved existing knowledge gaps and identify remaining research questions that the entire research community should consider and not just what the report authors plan to do next.

Literature Cited: Provide a list of the literature that was cited in the body of the report. Follow the format normally used for the scientific journals of your discipline. Apply this format in a consistent manner. Only include published and In Press materials in the Literature Cited. Personal communications can be captured in the body of the report, if needed; however, these communications along with journal articles submitted for review or that are in preparation are not appropriate to include as citations in the main body of the report or in this section.

Appendix A: Contact Information for Key Project Personnel

Appendix B: List of Completed/Planned Scientific/Technical Publications/Science Delivery Products: Identify scientific/technical publications that were produced during the course of the project, to include:

- 1. Articles in peer-reviewed journals (specify whether In Press, accepted for publication, in review [submitted for publication], or planned/in preparation).
- 2. Technical reports (specify whether In Press, accepted for publication, submitted for publication, or planned/in preparation).

- 3. Text books or book chapters
- 4. Graduate thesis (masters or doctoral)
- 5. Conference or symposium proceedings scientifically recognized and referenced (other than abstracts).
- 6. Conference or symposium abstracts
- 7. Posters
- 8. Workshop materials and outcome reports
- 9. Field demonstration/tour summaries
- 10. Website development
- 11. Presentations/webinars/other outreach/science delivery materials.

Notes: (1) Do not append copies of the preceding publications or unpublished materials to your report; rather, upload these to the **Other Products tab** or if a required deliverable to the **Deliverables tab**. (2) For published materials subject to licensing agreement requirements, please note the JFSP policy posted on the **Other Products tab** and flag the uploaded material appropriately (i.e., publicly releasable or not). If materials are not by copyright publicly releasable via a public website but you still want the JFSP to have access to them, select **Draft** (under the **Product Status field**). This will preclude the materials from being publicly accessible. (3) JFSP encourages PIs to periodically update materials on the **Other Products tab** after the project is complete.

Appendix C: Metadata (when applicable): Metadata must be provided when specified in the project's data management plan as part of the final report submittal. The metadata input field is located on the **Final Report tab**. Acceptable file types for metadata are: .xlsx, .xls, .xml, .html, .docx, .doc, and .txt. The metadata themselves do not need to be included in this appendix. This appendix should simply describe the nature of the data and metadata collected and prepared by the project, indicate where both are or will be archived, and describe and justify any deviations from the project's original data management plan.

Final Note: Some projects may have explicit deliverable requirements beyond the final report that are task statement specific, such as a user guide, model, or decision support tool. These generally will be uploaded separately to the **Deliverables tab**, but should be listed in Appendix B of the final report. No specific guidance is provided as to the format and content of these deliverables unless specified in the task statement. The PI is free to choose an appropriate format and content that best conveys the information to the intended audience. For software a working version of the software and a complete version of system documentation should be complete and available for upload to the JFSP website or preferably a hotlink provided to where the software will be hosted. Documentation should describe as appropriate any debugging procedures used to verify software performance, guidance to end-users as to application of the software, and business plans for ongoing maintenance of the software and its continued public access.

Preparation Guidelines

The JFSP expects all reports to be professionally written and properly edited. The following general additional formatting is recommended:

Font	Times New Roman proportional font (preferred)
Title	18 pt, bold, centered
Section headings	14 pt, bold, centered
Sub-section headings	12 pt, bold, flush left
Text	12 pt, single space
Margins	1 inch top, left, right, and bottom
Page numbering	Location: bottom center
	Numeration:
	Cover page: none
	Front matter: i, ii, iii, iv
	Body of the report, including Abstract: 1, 2, 3, 4
	Appendices: A1, A2,; B1, B2,
Word processing software	The final report must be submitted as one pdf file with
	the exception of metadata. Metadata should be submitted
	at the same time as the final report using one of the
	following file conventions: xlsx, .xls, .xml, .html, .docx,
	.doc, and .txt.
Charts, graphics, and scanned	Liberal use is highly recommended. All figures and
photographs	tables should be incorporated into the body of the text as
	they are discussed and not placed at the end.
Keywords	Include a list of keywords suitable for use in a
	searchable database.

Submittal Instructions

All JFSP final reports should be submitted online no later than the end date of the applicable agreement that governs the award. The JFSP review is not a peer review of technical or scientific content, but is intended to be sufficient to determine whether adequate technical and scientific information has been presented in a logical manner and that major conclusions are consistent with the results presented. A final version of the report must be approved by JFSP before the report and project can be considered complete.